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What is claimed is:

1. An apparatus for automatically turning off a source of illumination in a microscope, comprising:

a switch operatively arranged to control said illumination source;

means for sensing inactivity of said switch and for turning off said illumination source after a predetermined time period of inactivity.

- 10 2. The apparatus recited in Claim 1, wherein said switch is a mechanical switch.
 - 3. The apparatus recited in Claim 2, wherein said switch is a single pole, single throw switch.
- 4. The apparatus recited in Claim 1, wherein said means for sensing inactivity of said switch and for turning off said illumination source after a predetermined time period of inactivity comprises a microprocessor.
- 5. The apparatus recited in Claim 1, wherein said means for sensing inactivity of said switch comprises a digital semiconductor device operatively arranged to sense a logic level at one terminal of said switch.
 - 6. The apparatus recited in Claim 1, wherein said illumination source is an incandescent light bulb.

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7. An apparatus for automatically turning off a power supply in a microscope, comprising:

at least one switch element operatively arranged to control said power supply; and,

5 means for sensing inactivity of said at least one switch element and for turning off said power supply after a predetermined time period of inactivity.

- 8. The apparatus recited in Claim 7 further comprising an illumination source controlled by said means for sensing inactivity of said at least one switch element.
- 9. A method for automatically turning off a source of illumination in a microscope, comprising the steps of:

monitoring activity of a switch operatively arranged to control said illumination source; and,

turning off said illumination source after a predetermined time period of inactivity.

- 10. The method recited in Claim 9 wherein said step of monitoring activity of a switch comprises monitoring a logic level at one terminal of said switch, and triggering a shutdown of said illumination source when a transition in said logic level occurs.
- 11. The method recited in Claim 9 wherein said step of monitoring is done digitally.